Socket Tester User Guide

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Socket (Outlet) Tester

There are two reasons why you may have purchased a tester:

- before you buy a sheet
- after you have purchased a device and are wondering why you haven't got the results on you wish list.

The socket tester will show an earth present. It will not show the quality of the earth connection. This not essential but is a suggested good option. Available for most countries (see below). It is useful item for travel and just to validate all sockets in your house.

Testing for an Earth

Power must be on whilst testing for an earth but not when the Earthing device is plugged in. You do not need to unplug the sheet when not in use. You can have the power switch on or off.
NOTE for Europe: if either direction (either not both!) shows as below it is fine.

UK Display

					Comment
Correct				**OK**	You can use the mains plug in system.
No earth				**NO!**	Problem- is there an earth but it is faulty- check other plugs; check when wiring was done, call an electrician
L & N reverse					In UK have checked- in Europe this is common.
No neutral				**NO!**	Have this checked for safety
L & E reverse					Have this checked for safety

Europe Display

In one direction it may show as above- no earth and/or L& N reverse.
In the other direction is should show Correct but may still show L& N reverse.

Using adapters with testers and for connection

Universal adapters are available that allow you to connect a UK tester and the earthing cable mains adapter. A full kit for most countries is also available. (see www.bioenergyproducts.co.uk, Accessories for sourcing).

Video: Earthing Outlet Checker (USA) (0.20)
http://www.youtube.com/watch?v=-BAAKGM20O8
(Note that this for USA tester and just demonstrates its use- it is for USA and not other locations that use a different style and have a different voltage)

Country Specific Notes

Note that countries differ in their wiring regulations. By law many countries require that sockets are earthed; in some countries these may be selected sockets in the bathroom or kitchen. The location of the power (live (L) and neutral (N)) also varies. In the UK the L and N are on the same side. In Europe the L and N can be in two different positions: the tester is not clever enough to know and you have to try both ways up. Juts because a country has a particular connection does not mean that it has an earth connection. Hotels are notorious for only having some sockets earthed.

There is also a voltage consideration: Europe, Australasia operettas at 230 volts, 50 Hz. USA operates at 110 Volts, 60 Hz. The 230 v testers are not compatible with 11 v units and vica versa.

UK

In the UK the law requires that there is an earthing system. It is unusual for a good earthing system not to be present. It can however happen. In four years we have found 2 situations in houses/apartments where there was a loose wire in one plug and 2 where the wiring was just awful. We have also been in two UK hotels where there was a significant problem. It is a useful tool to check out both all plugs in your home and when travelling.

Europe, Italy, Switzerland

The following European countries are generally earthed: Denmark, Sweden, Norway, Germany, France, Belgium, Holland.
The following European countries are generally earthed but there may be a high AC voltage on the earth wire: Sweden, Norway,
The following European countries may only have an earthed socket in either the kitchen or bathroom: Italy, Romania, Hungary and possibly other ex. Communist countries. (BEPT does not know- you will need to check).

Important for Europe.
The live and neutral can be on opposite sides. You need to try the tester both ways- if the tester shows Correct in either the earth connection is fine. You can use a specific tester for Europe or the UK tester with an earthed adapter. BEPT stock both.
For Italy- if the socket is 3 in a line (not European shuko) you need to use and earthed Shuko to Italy adapter and an Eu tester,
For Switzerland the European tester with an adapter can be used. The EU tester needs to be tried in the 2 directions.

New Zealand and Australia

In Australasia houses are earthed by law; so these are similar to UK.

USA

In the USA the cable prong will go directly into the earth socket. It is highly recommended tat you use a USA tester in America. The USA tester is designed for 110 volts and UK/European ones for 230 volts. They are not interchangeable.

Other countries.

You need to check carefully. The UK tester can be used with an earthed adapter (not all adapters are earthed, BEPT do have adapters).

Extension leads

It is possible to use an extension lead: it must be a 3 wire (live, earth, neutral) and can be tested via the mains tester- or use a 3 or 12 m earthing extension cable.

Travelling

See the country you are travelling to and what socket system it uses. The best is a socket tester for that country. For some countries we supply a tester that has an adapter. If you choose to buy one yourself then please make sure it is earthed.

Available Testers

Note that USA testers at 115 volts can not be used for 230 Volts systems (and vice versa).

Socket earth tester 230 volts (UK&Eire) EFX

UK & Eire 230 volts Tester
Direct connect

Socket earth tester 230 volts (Europe) EFX

Europe 230 volts Tester
Direct connect

Socket earth tester 230 volts (Italy)

Italy 230 volts Tester
inc. Eu to It adapter

Socket earth tester 230 volts (Australasia)

Australasia 230 volts Tester
Direct connect

Socket earth tester 230 volts (Swiss)

Switzerland 230 volts Tester
inc. EU adapter

Socket earth tester 115 volts (USA)

USA 115 volts Tester
Direct

Socket earth tester 230 volts (India)

India 230 volts
Inc. USA UK adapter

Socket earth tester 230 volts (South Africa)

South Africa 230 volts
Inc. USA UK adapter

Product Testing

BV (Body voltage) Tester

The BV (Body voltage) tester will show that the system is working and also any residual voltage on the earth line. It can be used as an electric field checker. Supplied with a connection suitable for the country of use.

Continuity Tester- testing the sheet

This is a simple purpose made unit that connects to the sheet stud and can be run over the sheet. A green light shows a sound sheet.

Converters for travel

Adapters are available for many countries. Often they are just for the two power lines (live and neutral) and do not have an earth. For both the earthing connection and earth present testing an earthed adapter is required. They are available but you have to ask specifically. We hold a few for convenience. There is also a universal version. See below for details. These may allow you to use the adapter and tester for your country. These are earthed adapters- not all on the market are. Please check if you buy your own.

Swiss Adapter for EU Earthing Adapter and EU Tester

From EU > Switzerland
Suitable EU twin adapter, EU tester

Swiss Earthed Adapter for Single Earthing

From EU,UK > Switzerland
Suitable 1 cable.
Add splitter for 2 cables.

Italy Earthed Adapter for Single Earthing & UK Tester

From USA, UK > Italy
Suitable 1 cable, UK tester. Add splitter for 2 cables.

Europe Earthed Adapter for Single Earthing & UK Tester

For Europe
Suitable 1 cable, UK tester.
Add splitter for 2 cables.

From UK > India
Suitable 1 cable direct, UK EFX adapter, UK tester. Add splitter for 2 cables.

From UK > South Africa
Suitable 1 cable direct, UK EFX adapter, UK tester. Add splitter for 2 cables.

From USA > Europe
Suitable 1 cable, not for testers. Add splitter for 2 cables.

From UK > Europe Suitable For UK tester only, not cable

From USA, UK > Australasia
Suitable 1 cable, UK tester, UK adapter. Add splitter for 2 cables,

Multi Country.
Basis is UK so will accept UK Adapter (twin) and UK Tester. Useful for UK based travelers.

Adapter	Other Countries- note that the socket may be the same BUT that does not mean it is earthed.
UK	Bahrain, Bangladesh, Belize, Botswana, Brunei, Cameroon, Channel Islands, China, Cyprus, Dominica, El Salvador, Gambia, Ghana, Gibraltar, Grenada, Guatemala, Guyana, Hong Kong, Iraq, Ireland, Isle of Man, Jordan, Kenya, Kuwait, Lebanon, Macau, Malawi, Malaysia, Maldives, Malta, Mauritius, Myanmar, Nigeria, Oman, Qatar, St. Kitts-Nevis, St. Lucia, St. Vincent, Saudi Arabia, Seychelles, Sierra Leone, Singapore, Tanzania, Uganda, United Arab Emirates, United Kingdom, Vietnam, Yemen, Zambia, Zimbabwe
EU	Algeria, American Samoa, Aruba, Austria, Azores, Balearic Islands, Bosnia, Bulgaria, Cape Verde, Chad, Croatia, El Salvador, Finland, France, Germany, Greece, Guinea, Hungary, Iceland, Indonesia, Italy, Jordan, Korea, Laos, Luxembourg, Madeira, Monaco, Montenegro, Mozambique, Myanmar, Netherlands, Netherlands Antilles, Niger, Norway, Portugal, Romania, Serbia, Spain, Suriname, Sweden, Turkey, Uruguay.
Australasia	American Samoa, Argentina, Australia, China, El Salvador, Fiji, Guatemala, Kiribati, Nauru, New Zealand, Okinawa, Panama, Papua New Guinea, St. Vincent, Tajikistan, Tonga, Uruguay
Italy	Chile, Cuba, El Salvador, Ethiopia, Italy, Libya, Maldives, Syria, Tunisia, Uruguay.
USA	The connection cord is design to fit directly into the 'earth' or 'ground' pin (the round pin). USA style also used in Canada, Mexico, Central America, the Caribbean, northern South America (Colombia, Ecuador, Venezuela and parts of Brazil), Japan, Taiwan, Saudi Arabia. **CARE**: USA style sockets are 3 and 2 pin. 2 pin has no earth connection. Sometime 3 pin sockets do not have an earth and these should ALWAYS be tested.

Socket OK but results not as expected

It is rare for a well looked after product to be ineffective. The following are checks.

Fundamental First Checks

Fundamental 1- unplugged!
Fundamental 2- broken cables
Fundamental 3- no direct skin contact
Fundamental 4- rods in dry ground

System Checks- with instruments

Confirm your connection to Earth: the best way is a Body Voltage tester that checks the whole system.
Check the system is conductive: the conductivity tester is simple and ideal. The BV tester can also be used, but is more complex.

Individual Related

Still working but new benchmark: often we lose sight of scores on the initial wish list.
Changes in stress levels or lifestyle: these often go unnoticed and are often a gray scale.
Dehydration- it is important to be well hydrated for all body operations including earthing benefits.
Use of body lotions: these can coat the silver surface.
Improper Care of Earthing Sheets: washing powders choice is very important in preserving sheet life.